The Buck Stops at the Top: Comparison of Safety Related Leadership Antecedents in Prosecuted and Non-Prosecuted Organisations in New Zealand

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By Hui-Yin (Trisha) Chueh

A research project primarily supervised by:

Associate Professor Christopher Burt, University of Canterbury

Co-supervised by:

Dr. Joana R. C. Kuntz, University of Canterbury

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Abstract

The current research emerged in response to recent alerts of increasing organisational safety failures in New Zealand's high risk industries. It was theorized that safety climate may be largely determined by the quality of safety-centered leadership under which an organisation operates. The study utilized reports of organisational safety prosecutions within New Zealand to develop a quasi-experimental design which compared persecuted and non-prosecuted company's leaders on measures of ethical values, moral philosophy, social responsibility, corporate psychopathy, and leadership style. Issues of response rate inherent to the study design were encountered during data collection, and no significant between group differences consistent with the study predictions were found. Theoretical and practical interpretations are made in light of the results, suggesting that dynamics within group-decision processes and the top governing structure of companies may be significant factors in affecting leader safety performances within these industries.

Introduction

The current research aimed to identify potential leadership-based antecedents of organistional safety outcomes in high-risk industries. Firstly, a summary of New Zealand's current standings in its industrial health and safety status is provided. In particular, statistics on workplace injury and fatality rates are presented along with references to major national industrial safety incidents that have occurred over recent years. This then links to discussions highlighting the relevance of safety leadership to organistional safety awareness and compliance, with references to both contemporary field-expert perspectives and literature-based empirical evidence of leader-attribute effects on organisational safety outcomes. Value and personality-based leader attributes are then examined in conjunction with the types of leadership styles that executive and directorial-level officials adopt in their performance of safety-related obligations. Finally, theories are posited suggesting that major organisational safety failures (in the form of legal prosecutions) may be the result of leader value-based attributes and leadership styles, with corresponding research hypotheses made to test for these arguments.

Overview of Current State on New Zealand Health and Safety

The current state of organizational health and safety in New Zealand in the last decade shows astonishing records of workplace related incidents involving deaths and injuries. Tallies of work related injury claims in New Zealand alone have reached as high as the 200,

000 mark in the early 2000's. And although these figures have seen some gradual decrease over the years, the total recordable injury frequency rate (TRIFR) as reported by industries remains at a level of major concern (Statistics NZ, 2014). As a country largely based on heavy trades such as agriculture, forestry, fishery and manufacturing, New Zealand has undoubtedly seen its fair share of safety related incidents. Inside high-risk industries where workers are required to operate in and out of highly perilous environments involving heavy machinery, hazardous substances, and dangerous heights and landscapes, the possibilities of an operational mishap is constantly within a meter-long fall's reach. A slip of the feet or a split-second lapse in judgment may result in a mere scratch to something as disastrous as a life-ending injury. The implications of this can be wide-reaching. From the obvious physical and emotional grievances suffered by the victim and their families, workplace-related incidents may also inflict hefty economic and social damages to an organization's people and its business, such as costly lawsuits and loss of company reputation and status (Biggs, Banks, Davey, & Freeman, 2013).

As possible and severe as the outcomes of organizational health and safety failures may be however, the amount of attention and effort placed on minimizing these possibilities remain largely disproportionate to the occurrences of workplace safety incidents observed over the years. Poor safety performances in New Zealand industries has been repeatedly recognized and acknowledged by both the media and business leaders (Hughes, 2013a; Gaffaney, 2014; Ministry of Business, 2014a; Roxburgh, 2014). An examination of

Department of Labour 2012 statistics shows an average of 102 workplace-related deaths were recorded in every 12 month-period (2008-2010), followed by 378 serious non-fatal injuries, and an alarming financial toll of $3.5 billion in social and financial costs associated with dealing with workplace injury and diseases. Gradual illnesses contracted in the workplace have also contributed to an estimated 516 to 804 deaths, with 17,000 to 20,000 new cases developing each year. Furthermore, figures from Statistics New Zealand reveals that 182,900 ACC claims made in 2013 had originated from work-related injuries, which is a notable increase from the 180,000 cases recorded in 2012. In an overall perspective, this implies an injury claim rate of 92 cases per 1000 full-time employees, suggesting an approximate 9% injury report per year in the workplace since 2011. WorkSafe New Zealand also reports over 51 workplace deaths for the 2013 year, with fatality counts rising continuously since 2007 (Ministry of Business, 2014b).

One of the most disastrous case of workplace health and safety in New Zealand is the 2010 Pike River Coal Mine tragedy. The incident, with the loss of 29 workers, sparked major accusations towards the safety malpractice of the mining company and its officers, and specifically the negligence of the chief executive in failing to implement necessary safety management practices in the mine's facility and operation (Ministry of Business, 2011). In their report on the incident, the Royal Commission on the Pike River Coal Mine Tragedy (2012) made specific effort in highlighting the appalling safety record New Zealand currently holds in comparison to other countries. In more recent cases, multiple reports of safety

incidents have been issued to organisations such as the Lyttelton Port company in Christchurch. Within the 12 months since November 2013, at least three accidents involving two deaths and one serious injury have occurred at the port's Lyttleton operation site. This is once again startling evidence that accidents are occurring too frequently, and has inevitably attracted the attention of health and safety officials in demanding immediate improvements to be made in the company's focus on health and safety practices (Wood, 2014)

In the wake of all the incidents noted above, it is evident that New Zealand is in dire need of a re-evaluation of its health and safety systems for high-risk industries. Consequently, the health and safety landscape in New Zealand has begun to witness gradual increased action in driving changes to improve the current state of high-risk industry safety as a response to these poor performance records. As seen in the 2012 status report issued by the Department of Labour, the New Zealand government has introduced proposals for the increase of preventative actions in reducing health and safety issues in New Zealand. These proposals include numerous strategic system reforms, such as increased governmental funding for health and safety activity; industry target setting to reduce incident rates; improvement plans for the measurement, monitoring, timeliness and quality of injury and fatality report data; and implementing preventative actions in key industries requiring specific attention (such as forestry and agriculture). Major legislative changes are also taking place, such as the introduction of bills to reform the Health and Safety in Employment Act 1992. In terms of increased action on the organisational end, the ZeroHarm Safety Leaders Forum (2014)

annual summary report also highlighted the need for improvements on safety awareness and participation amongst business owners. In this report, areas of improvement include growing leader awareness of health and safety issues, increasing participation in forums, safety projects such as the Contract Safety Initiative and Executive Safety Leadership Programs, and facilitating safety guidance to directors and chief executives in gaining shared learning on methods of keeping industry operations safe.

However, despite these efforts, bleak evidences of poor health and safety performance continues to emerge. The current study bases its research focus around Eriksen's (2013) report on the status of health and safety prosecutions in New Zealand industries. An alarming number of 21 NZ organisations have been charged with major safety incident offenses more than once in the past five year period, with some organisations named in the article receiving as many as six convictions during this time. It then becomes pertinent to ask the question- what is it within the management of these organisations that is evoking such high rates of safety breaches? An examination of the prosecuted parties provided by WorkSafe New Zealand records reveals that in many of the cases reported, particular onus was placed on the leaders of the convicted companies. The charges named under the Health and Safety in Employment Act were mainly under the provision of "failing to take all practicable steps to ensure employee safety". Many of the incidents may be attributed to causes such as lack of employee training, inadequate supervision, using unsafe or malfunctioning equipment, and carrying out tasks in under-protected work environments. More queries then surface in

relation to the role of the organisational leader in these incidents: how did the company's management allow these incidents to occur, why had obvious safety issues been overlooked, and was the leader even aware of the potential problems that lurked beneath the operations taking place?

The idea that dysfunctional safety leadership may be the common factor in these reported incidents then becomes increasingly tangible. As the head of their business, industry leaders are responsible for setting key visions, formulating strategies for reaching objectives, and planning the execution of operations through various decision making and implementation processes (Duckers, Stegeman, Spreeuwenberg, Wagner, Sanders, & Groenewegen, 2009; Gupta, 2009). Amongst their extensive range of responsibilities, industry leaders are also tasked with making decisions regarding the safety design and practice of their business operation. But does their safety-related responsibilities end here? The discussions below further explores the association between corporate leadership and industry safety, as well as examining theories on the interaction of leadership attributes and their possible influence on organisational safety outcomes.

Safety Leadership

In examining the link between leadership and organisational safety, the expression 'The buck stops at the top' aptly summarizes the key dynamic between the two constructs. Adopted from the words of Harry S. Truman during his US presidential terms, the phrase

depicts corporate responsibility as the buck that is passed on from one person to another (Eduljee, 2008) In line with the argument of the current study that leaders have a key responsibility for employee safety, this echoes the central concept that organisational safety must be a top-down process starting with the executive/directorial level leaders heading an organisation (McFadden, Henagan, & Gowen III, 2009; Roxburgh, 2014; Wu et al., 2008). Currently, the baton of health and safety is too often passed down from the top tiers of companies as a responsibility for those in the lower management level to shoulder (Davidson, 2013; Hughes, 2013b; Nielsen, Eid, Mearns, & Larsson, 2013). Boards and leaders are often found lacking in health and safety-specific knowledge in the fields they are operating, a shortcoming which leaders are either conscious of but lack the initiative to make up for (passive leadership), or one that the leader may be entirely unaware of until issues arise (Mullen, Kelloway, & Teed, 2011). Strong evidence of this can be found in the aforementioned Lyttelton and Pike River cases, both of which have had particular expectations turned towards the CEOs heading these organisations in assuming responsibility (and both having seemingly failed to) for ensuring workplace incident and risk prevention (Koubaridis, 2011; Palmer, 2014). This disregard of workplace related safety responsibility stems from a myriad of factors, many of which can be found originating from the attitudes and mind-sets of the leaders themselves in their commitment to workplace safety.

The case study by Shell Companies Chairman Rob Jager (2013) illustrates the crucial role of the leadership mindset in fostering a successful safety cultures at work. In Jager’s

view, the safety leader mindset is characterized by adopting a state of healthy "chronic unease". This entails leaders maintaining an active and constant state of vigilance over health and safety issues at work- by way of taking initiative in understanding safety risks at the frontline level, having personal involvement in clarifying and monitoring safety performance, and lastly holding every company member to account on safety matters. In their discussion "Safety leadership must start at the top" in the National Business Review, Holcim director Smith (2012) also stresses the same fact. Active safety leadership starting from the top tiers of the organisation is imperative and leaders must be a major driving force in establishing safety cultures at work. Smith pushes for a "zero harm safety first" mentality, one that prompts leaders to proactively assess and prioritize the importance of worker wellbeing and workplace safety against other organisational obligations. This then should be translated into meaningful steps and actions to reach the zero-harm objective, such as actively taking part in health and safety decision making, as well as engaging workers at the front line on safety knowledge and practice.

Academic advocates of safety leadership too are encouraging specific focus on leader participation and engagement in workplace health and safety issues. This involves the leader demonstrating pro-active safety orientated attitudes and behaviours with employees across all levels in the organisation. Kelloway's (2014) SAFER model illustrates this with five key action concepts: Speak, Act, Focus, Engage, and Recognize. In directing a high risk industry, leaders are firstly expected to be vocally active about safety issues (Speak). This involves not

only communicating about the importance of safety awareness and compliance themselves, but also encouraging further discussions across the top executive body and continuing down the management and frontline operation teams (Duckers et al., 2009). Facilitating board meetings where health and safety is included as a main agenda, and conversing with supervisors and workers about potential risks down at the production line are practical examples of how leaders can verbally maintain safety consciousness at work. Next, discussions made on safety matters need to manifest into tangible action (Act). Leaders are required to listen and respond to issues presented to them during communications with actions to address those problems. The sustaining of attention and effort in upholding safety awareness compliance is then necessary for successful outcomes to emerge (focus), which includes maintaining close interactions with employees (Engage), and continued identification of safety-related behaviours and feedback reporting (Recognize).

Major reforms in the law are also making contributions in prompting leaders to better their performance in carrying out the due diligences listed above. As a response to the Royal Commission's attempts at solidifying the CEO's liability in the Pike River incident, upcoming changes in New Zealand's health and safety legislation are also being made explicitly as a warning sign that industry leaders in particular are now being held accountable for all safety related incidents in their business. This bill to reform New Zealand's health and safety systems serves to highlight the increased need for leaders to take conscious responsibility for health and safety matters in their industries. As of April 2015, new

provisions under the Health and Safety at Work Act (formerly Health and Safety in Employment Act 1992) will be put in place to enforce diligence obligations on "officers" (business directors, CEOS, any person of decision making authority over a business) in ensuring compliance with health and safety obligations, as well as naming the primary duty holders and their responsibilities at work (Wilson, 2014). Under this new legislation, it is no longer acceptable for industry leaders to remain unaware of the current state of health and safety in their organisation. Leaders can no longer deny responsibility for incidents on the basis of having a lack of familiarity or knowledge about the safety affairs, and are now expected to take active initiative in familiarizing themselves with all potential risks and hazards in the workplace, as well as the appropriate practical steps in controlling for these risks (Wu, Chen, & Li, 2008).

The set of actions above with which a leader demonstrates safety commitment in promoting health and safety behaviour and practices is then transferred onto their employees, who from there are prompted to adopt similar values and attitudes in their own work safety performances (Mullen, 2014; Oumlil & Balloun, 2009). Past findings also supports this leader-follower dynamic, whereby the senior level supervisors tend to exhibit strong influence over the safety attitude of employees alongside other safety related outcomes (Dingsdag, Biggs, & Sheahan 2008)

The exact person-related factors that facilitate leader influence on follower safety perceptions and attitudes however remain somewhat nebulous. Conchie, Moon and Duncan

(2013) found that contextual influences such as role overload, business demands, and characteristics of their specific workforces affected supervisory engagement with safety leadership behaviour. However, a deeper analysis of what person and values-level attributes are involved in interaction with these situational factors remains scarce. Fruhen, Mearns, Flin and Kirwan (2013) takes a further step in this investigation of leadership characteristics, and finds six person-based attributes that significantly influence the safety intelligence in senior leaders: social competency, safety knowledge, motivation, problem solving, personality and interpersonal leadership skills. But it is yet unclear how each of these attributes may affect a leader's ability and intention to engage in health and safety practices. While Fruhen and colleagues' findings centre mostly on competency and skill-based leadership traits, the current study speculates that value and intention-driven traits may also play a significant role in influencing safety leadership perception and outcomes. It has been suggested that the type of intentions and behaviour upper-level managers and leaders exhibit in work settings is largely shaped by their natural dispositional traits and individual self-concepts (Huhtala, Kangas, Lamasa, & Feldt, 2013). With this notion in mind, it is argued that intention to engage in safety related conduct may also be influenced by these personal values and beliefs, such as ethical and moral values and ideologies. This study thus aimed to examine these possibilities.

Outside of the safety context, Oumlil and Balloun (2009) have also concluded that business leaders' decisions involving fairness and justice (which often encompasses health

and safety) are largely governed by attributes such as ethical and social concerns. In accordance with the saying ‘with great power comes great responsibility’, there is a common expectation for leaders to follow the principles of justice, equity and fairness in their right to exercise the powers of decision making and authority (Ciulla, 1998). Following this assertion, Huhtala et al. (2013) posits that a value-based ethical dimension will always be an implicit or explicit part of leadership practice and processes. Current literature has reported that employee perceptions towards safety policies, organisational commitment, and performance quality are positive top-down outcomes of ethical leadership (Ambrose 2008; Hansen, Alge, Brown, Jackson, Dunford, 2013; Hunt, Wood, & Chonko, 1989).

Ethical, Moral, Social, and Psychological Facets of Safety Leadership

Like many of the safety leadership behaviours discussed earlier, climate-defining attributes such as organisational ethics is also demonstrated as an influential top-down process (Webley & Werner, 2008). Top-level management and leaders are required to showcase ethical commitment in all of their organisational practices in order to instil the same mindset in their employees. Leaders are responsible for guiding workers through ethical issues and demonstrating the right and wrongs of various work related situations, and ultimately acts as the moral compass from which employees directs their own ethical and moral perceptions (Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Resick, Hargis, Shao, & Dust, 2013; Vlachos, 2013). It then becomes relevant to consider the exact value-based

attributes that might come into play in a leader's safety related decision making. Leaders are frequently required to juggle attending to health and safety matters against obvious business constraints such as time and cost, a balance on which safety is often placed on the lighter end of the scale (Hansen et al., 2013; Nicholson, 2014). The leader's ethical standards and moral reasoning then act as major factors in affecting how they determine the rights and wrongs of safety-related decisions (Ambrose, 2008). A profit-orientated CEO would be likely to consider the costs of installing updated safety systems in their organisation with what could be made without such efforts. Their final decision may then largely depend on if the leader's ethical and moral perceptions deems the lack of investment on safety measures as something that is wrong and potentially harmful to their employees. Joosten, Dijke, Hiel and Cremer (2014) also identifies that possessing good moral identity serves as a motivational basis to engaging in ethical behaviour. A CEO with a stronger moral perception may then be more inclined to place health and safety as a higher agenda item amongst the organisation's other obligations. Decisions to take part in safety behaviour may also depend on the level of corporate social responsibility the leader holds towards the organisation and its workers. In socially responsible leaders, particular focus is placed on fostering the welfare of the organisation's own people (employees, customers, stakeholders), as well as to the larger community it is surrounded by (Perez & Rodriquez del Bosque, 2013). This results in outcomes such as employee benefits, workplace support, and enhanced business practices including health and safety (Du, Swaen, Lindgreen, & Sen, 2013).

The absence of ethical, moral and social considerations in leaders may also signpost potential deviating leadership personalities. In investigation of this leader dynamic, the concept of corporate psychopathy is also considered. This depicts organisational members (leaders in many cases) who engage in anti-social workplace behaviours such as exploitation, abusing positional powers, violating employee trust, and taking part in acts of fraud and dishonest business practices for financial or personal gains (Babiak, 1995; Babiak, Neumann, & Hare, 2010). The findings by Babiak and colleagues have suggested alarming evidence of psychopathic leadership in the normal community, whose levels of latent psychopathic tendencies were found to be on similar levels with those in criminal populations. This prompts further research interest in the current study in speculating possible associations between leadership psychopathy and organisational safety outcomes. In Westerlaken and Wood's (2013) study, psychopathy was found to correlate positively with a passive leadership styles that entails avoidance of decision making and organisational responsibility. This neglect of leadership obligations may very likely expand to negatively affect the presence and quality of safety implementations within organisations, as well as the policies and rules of compliance that surround safety measures.

Leadership Styles on Safety Outcome

Westerlaken and Wood's (2013) results also highlights the influence of leadership styles on corporate outcomes. Continuing on this trend, the meta-analysis by Clarke (2013) further

suggests significant association of leadership styles with safety activity and behaviour in organisations. It was identified in this study that transformational and transactional leadership each exerts positive impacts on safety outcomes such as rule compliance, employee safety participation, and overall perceived safety climate. In Clarke's review, transformational leadership influences safety outcomes through the leader's ability to foster heightened employee attitude and commitment towards safety issues at work. Under this approach leaders establish positive influences over employees through acts of consideration and inspiration, which in turn garners employee trust and identification with the leader's organisational values and vision. Translated into a safety context, followers become motivated to engage in safety practices themselves as they actively share the leader's goals in achieving positive safety climates at work. Transactional leadership on the other hand is largely associated with the use of contingent rewards and active management of employees in correcting for worker behaviour before possible problems could arise. Through contingent reward leaders and followers share a reciprocal-exchange relationship, where behaviours in meeting work expectations and objectives are acknowledged with extrinsic or intrinsic rewards such as monetary bonuses and company recognition (Howell & Avolio, 1993). Applying this to organisational safety, transactional leaders may reward their managers and frontline workers for their adherence to safety procedures and policies such as wearing protective gear around hazardous work environments, which has shown to increase employee reliability in workplace safety performance (Zohar, 2002). On the other end of this spectrum

then lies the negative construct of passive-avoidant leadership. Defined by Avolio and Bass (1995) as laissez-faire and passive management by exception (MBEP) styles, passive-avoidant leadership characterizes leaders as being absent and aversive of organisational obligations and duties. Leaders operating under this style are non-responsive to employee needs, fails to address workplace issues until problems arise, and displays ambivalent or ignorant attitudes towards matters requiring critical decisive action (Jackson, Hutchinson, Peters, Luck, & Saltman, 2013). It is then largely foreseeable that such a style is likely to inflict negative impact on risk-prone areas such as workplace safety, as readily demonstrated by Kelloway, Mullen, & Francis'(2006) study on the effects of opposing leadership styles in organisational safety. Incremental influences on passive-avoidant leadership were found to negatively affect workplace safety consciousness and climate, which has inevitably lead to increased injury rates on work sites. Transformational leadership on the other hand was found to exhibit the exact opposite effect to passive-avoidant leadership on safety outcomes, which then once again reinforces the assumption that leadership styles are significant indicators in determining the types of safety outcomes an organisation is likely to anticipate.

Similarly, field studies by Hystad, Bartone, and Eid (2014) also demonstrates transformational and authentic leadership styles as being predictors and enhancers of safety climate and performance. Their examination of authentic safety leadership identifies this effect as the result of "a pattern of leader behaviors that draws upon and promotes both positive psychological capacities and a positive ethical climate to foster self-awareness, an

internalized moral perspective, balanced processing of information…and influence over subordinates [through] positive role modeling" (p.43). This description aptly echoes the value, personality, and leadership-style based attributes which the current study argues has significant relevance to organisational safety outcomes. Internal ethical climate and moral perspectives signal the ethical, moral, and social responsibilities leaders should possess and demonstrate in their performance of organisational duties. Psychopathic characteristics in corporate leadership is then associated as a potential flipside to positive psychological capacities. Lastly, positive role modelling alludes to the influential components of transformational leadership, all of which may be pertinent constructs in establishing specific leader attitudes and behaviours in the workplace. As presented below, discrepancies in the level of these character-shaping factors may affect leader performances in the organisational safety context with notable contrasting implications.

Current Research

In relation to the discussion of leader attributes above, it is postulated that ethical, moral, social and psychological attributes could influence the type of safety leadership style each individual possesses. Moreover, the combination of these traits and styles may then give rise to differing organisational safety outcomes, such as an increased number of accidents and levels of injury or fatality rates. In particular, the value and personality-shaping constructs within those assuming leadership roles will be considered in the light of the incident prone

industries mentioned above. The present study thus aims to build on the safety leadership literature by attempting to identify differences in safety perceptions between executive-level leaders in organisations with and without reported safety incidents. To achieve this, organisations with safety related prosecution histories in New Zealand will be compared with their corresponding non-prosecuted industry counterparts to determine if there are differences in leadership attributes. This comparative design of the study was aimed to reveal insights into leadership attributes and styles existing within current organisational leaders, which paired with their industry safety records (prosecutions or no prosecutions), may be very telling of the level and quality of safety leadership in high-risk industries.

Presently, the majority of research conducted on corporate health and safety focuses heavily on measuring employee perceptions of leader influences on safety outcomes, (Kapp, 2012; Zohar, Huang, Lee, & Robertson, 2014; Wu et al., 2008), whilst little attempts are found in addressing the top-tier leader's own perception and attitudes in the workplace (Hansen et al., 2013; Schminke, Ambrose, & Neubaum, 2005). Employee perceptions however, while telling of their immediate supervisor or manager's approaches towards safety compliance, often do not accurately reflect the true safety values of the top organisational directors and CEO's with whom they have limited interactions (Brown, Trevino, & Harrison, 2005). This consequently prompted the current study to focus its investigation on organisational leaders in the top executive and directorial positions in order to capture true safety leadership qualities more closely at the first-person level.

The rationale for the current research is then formulated, whereby the degree to which leaders possesses ethical, moral, and social regards towards the wellbeing of both employees and the organisation itself will be reflected in the form of safety prosecutions. Positive leadership styles (transformational and transactional) may be found in leaders whose organisations have not been reported for major safety-related incidents. Vice versa, the study expects to find comparatively lower levels of value-based attributes, higher psychopathic personality characteristics, and/or more prominent passive-avoidant leadership being demonstrated in organisations that have been charged with safety offenses in the past. The argument posits that through value-guided decision making processes, behavioural actions such as safety compliance and rule implementation may manifest, in turn increasing employee and worker awareness, and enforcing practices to increase overall organizational safety climate. Specifically, the constructs of corporate ethical values (CEV), personal moral philosophy (MP), corporate social responsibility (CSR) and psychopathic personality traits will be assessed through leader self-report ratings. A measure for identifying leadership styles will also be administered to compliment the results found on the four attributes above. Using Clarke's (2013) review on leadership styles, a further extension to the research hypothesis is added, suggesting that leaders from prosecuted and non-prosecuted organisations can also be operating under different leadership styles due to their differing levels of value and personality-based attributes mentioned above. This subsequently generates three key hypotheses that incorporates both leadership styles and the attributes they may reflect:

H1: Leaders in organisations with no prosecution records will exhibit higher levels of a.) ethical values, b.) moral philosophy, c.) corporate social responsibility, and lower levels of d.) psychopathic personality traits when compared to leaders in organisations with prosecution records

H2: Leaders in non-prosecuted organisations will demonstrate higher levels of transformational or/and transactional leadership styles than leaders from organisationals with prosecution records.

H3: Leaders in organizations with prosecution records will demonstrate higher levels of passive-avoidant leadership styles than leaders from non-prosecuted organisations.

Method

Design

The current research adopted a quasi-experimental design using company prosecution status for categorizing the independent variable of prosecuted and non-prosecuted organisations. Companies holding records of safety-related prosecutions within the 2012 to 2014 period were allocated into the prosecution group, while those without reports of safety prosecutions in the same time span were placed in the non-prosecuted group. To identify which group a returned response belong to, the prosecuted and non-prosecuted organisations were sent and identified by different colour-coded survey booklets.

Sampling

Hardcopy surveys were distributed to a total of 100 directors and chief executive officers of high-risk industries within New Zealand. A list of 50 high risk organisations owned and operating within New Zealand with histories of reported safety prosecution dating back to 2012 were solicited through various media and technological channels. Informational sources such as news articles (NZ Herald, Stuff.co.nz), public legal databases (UC Law Subject Guide), and websites of governmental bodies such as the Ministry of Business, Innovation and Employment were consulted for records of safety-related prosecutions in New Zealand industries. The names of the organisation and corresponding CEO's were then compiled. Similarly, a list of 50 non-prosecuted companies were found via consulting organisational

listing websites such as IndexNZ, business.govt.nz, and OpenCorporates. The organisations in each group came from the same industries, which includes forestry, construction, manufacturing, transport and logistics, farming, engineering, aviation, metal works, recreation, and domestic services. Sampled companies included a mixture of both private and public sector industries. All organisations were sent paper and pencil surveys via posted mail personally addressed to the leader of that company (where the names of the leader was not available, a general "CEO/Director" title was used).

Participants

A total of eighteen organisational leaders responded to the research survey. All participants were directorial or chief executive-level job incumbents within their organisation. Position titles varied with the structures of the company that each participant headed, including chief executive officer, director, managerial director, general manager, and executive general manager. Overall, 16 males and 2 females took part in the study, with an overall mean age of 49.6 years (SD= 8.5) for the entire participant sample. The average length of tenure in the participant's current job position was 126.4 months (10.5 years), with a minimum tenure of 3 months and maximum of 432 months (36 years). The mean company size consisted of 198 employees, ranging from a minimum of 4 to a maximum of 1000 employees. Descriptive results for each group are presented in the results section.

Measures

The survey instrument was constructed using a compilation of adapted scales measuring the constructs of ethical values, moral philosophy, corporate social responsibility, psychopathy, and leadership style. Participating organisational leaders were asked to rate items on each of the four constructs based on their perceptions of themselves. For two of the leadership constructs (ethical values and corporate social responsibility), the wording in each of the scales were adapted from rater-leader perspectives to first person perceptions eg. From " [The leader] Has the best interests of employees in mind" to "I have the best interests of my employees in mind". Titled "New Zealand Industrial Leadership Research Survey", the survey comprises of seven main sections. The first section was headed by a demographic information page (See Appendix A for survey booklet), which requests for general participant information age, gender, job tenure, size of company, and industry type. An organisational activity time allocation form was then constructed and added as part of the demographics section to obtain information on the time percentages leaders spend on various organisation tasks. These include: risk management, resource acquisition, logistics, budget activities, performance/efficiency issues, pricing/sales, contract negotiation, compliance with legislation, legal matters, such as prosecutions, selection of staff and other human resource issues, and other.

A 5-item strategy development style question item was included for leaders to indicate their dominant decision-making styles specifically towards health and safety issues. For this

question, Judge and Dobbin's (1995) adaptation of Vroom and Yetton's (1973) model on decision methods for group and individual problems was adopted for the current survey. Judge and Dobbin's version of the scale was used in this case rather than the original due to its more simplified and relevant wording for the purposes of the present study. (See Appendix A for question and response selections)

The study used a 1 to 7 point likert rating scale for four of the five scales (Ethical values, moral philosophy, corporate social responsibility, and psychopathy), with response anchors ranging from (1) strongly disagree, to (2) disagree, (3) somewhat disagree, (4) neutral, (5) somewhat agree, (6) agree, to (7) strongly agree. The exception from this response format was for the leadership style Multifactor Leadership Questionnaire (MLQ) measure, which used a 5 point frequency scale: 0 (Not at all) to 4 (frequently, if not always). The average scores of all scales were derived by summing the ratings for each item and dividing by the total number of items in the scale. To counterbalance the influence of common method variance and order effects, three versions of the survey was distributed with each of the scales placed in different orders in the survey booklet. With the exception of Judge and Dobbin's (1995) decision-making scale, the relevance of health and safety was not mentioned for any of the other scales in order to minimize multicollinearity of responses as well as the creation of potential bias by participants.

Ethical Leadership Scale

Ethical values was assessed by an adapted version of the Ethical Leadership Scale (ELS) by Brown, Trevino and Harrison (2005). This instrument consists of ten items, which captures the ethical leadership construct through the rater's perceptions of their own leaders in the workplace. Example items include: "I make fair and balanced decisions", "I set an example of how to do things the right way in terms of ethics". High scores suggested high perceived levels of ethical conduct exhibited by the leader. The items of the scale were designed by Brown et al. (2005) to reflect values that demonstrated ethical leadership behaviour, including consideration, honesty, trust, fairness in interaction, and social charisma. The initial development of the ELS yielded a reliable internal consistency coefficient of .92, and was subsequently confirmed with test-retest alpha values of .94 and .93 by the same research group. (See Appendix A section 1 for full scale)

Ethics Position Questionnaire

Moral philosophy was measured by the Ethics Position Questionnaire (EPQ) by Forsyth (1980), which assesses the leader's degree of idealism and relativism to universal moral and ethical rules and standards. The scale comprises two parts: idealism and relativism, each measured by ten items. Idealism is described by Forsyth as being the extent to which a rater agrees that desired consequences, such as the concern for the welfare of others, can always be achieved with the right, or, ideal actions. Example items include: "One should not perform an

action which might in any way threaten the dignity and welfare of another individual". Relativism then assesses the rater's moral standings with rules and standards in relation to the contexts they are surrounded by, mainly cultural, social, individual and historical. Examples include: Relativism- "Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person". For the purposes of the current research, only the idealism items were included in the research survey due to their relevance to safety related leader judgements. High scores on the idealism scale suggest that the individual possesses strong ideals in achieving desired outcomes through morally just and right actions. The EPQ has generated reliable internal consistency coefficients for both parts of the scale, with .80 and .73 for idealism and relativism respectively. Test-retest consistency values of .82 and .84 were later confirmed in subsequent studies by Forsyth, Nye and Kelley (1987). (See Appendix A section 2 for full scale)

Corporate Social Responsibility Image Scale

The corporate social responsibility image scale (CSRI) developed by Perez and Rodriquez del Bosque (2013) was adopted to measure an organisation's degree of concern and consideration exhibited towards social, cultural, and environmental affairs. The original 20 items are rated by respondents based on their perceptions towards the company, and the wording was adapted for the current study to prompt self-ratings from participating leaders. Only 5 out of the 20 items (items 10 to 14) from the CSRI were included in the current

survey given their relevance to employee safety and wellbeing within organisations. Examples include: “I offer training and career opportunities to my employees”, “I contribute money to cultural and social events (eg. music, sports)”. High ratings on the scale indicates respondents possess significant levels of corporate responsibility towards facilitating the welfare of their employees, specifically in regards to remuneration, safety, fair treatment, training and career opportunities, and positive work environment. Perez and Rodriquez del Bosque reported sound sectional reliability coefficient ranges for each of the four item groups (Customers .81 - .86, shareholders & supervising boards .76 - .80, employees .86 - .89, society .87 - .89)**.** (See Appendix A section 3 for full scale)

Levenson Psychopathy Self-Report Scale

The Levenson Psychopathy Self Report Scale (LPSR) developed by Levenson, Kiehl, and Fitzpatrick (1995) was used to measure the psychopathic dimension of an individual’s social and interpersonal philosophies. The scale is divided into two parts, with 16 items pertaining to primary psychopathy (eg. “Looking out for myself is my top priority”), and 10 items to secondary psychopathy (eg. “I quickly lose interest in tasks I start”). Items on the primary psychopathy section are geared towards measuring antisocial and manipulative behaviour, with high ratings on this scale indicating significant tendencies to demonstrate selfish and inconsiderate behaviours towards others for one’s own gains. Part two of the scale focuses on capturing social impulsivity and self-defeating lifestyles. A reliability coefficient

of .82 was achieved for primary psychopathy, while the secondary items obtained an alpha of .63. Later re-examinations by Gummelt, Anestis, and Carbonell (2012) of the LPSR reported satisfactory test- retest levels of .65 (with items omitted). The 10 secondary psychopathy items were not used in the current survey due the consideration that the items were not relevant to either corporate or organisational safety contexts. Some item wordings were changed in the primary psychopathy scale from colloquial to more formal terms appropriate for a CEO population (eg., "My main purpose in life is getting as many goodies as I can" was changed to "My main purpose in life is getting as many benefits as I can"). (See Appendix A section 4 for full scale)

Multifactor Leadership Questionnaire

The Multifactor Leadership Questionnaire (MLQ) developed by Avolio and Bass (1995) was used to assess transformational, transactional, and passive/avoidant leadership styles. The MLQ 5X-Short Leader self-rating form was used to measure transformational, transactional, and passive-avoidant leadership styles in the present study. Transformational leadership entails active leader commitment and engagement in fostering employee development and welfare via inspirational and motivational approaches, while transactional leadership involves prompting employee performance through contingent rewards and exchange systems. Passive-avoidant leadership represents the negative counterpart of the two styles above, entailing passive, dysfunctional leadership adopted by responsibility-averse

leaders who are negligent of organisational duties and absent to follower needs. The scale comprises of 45 items measuring 9 leadership subfactors: idealised attributes, idealised behaviours or influence, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, active management by exception (MBEA), passive management by exception (MBEP), and laissez-faire. The scale also includes 9 items pertaining to the result of leadership characteristics, comprising of outcome factors of extra effort in leadership, leader effectiveness, and satisfaction. Participants rated items based on the frequency of their efforts in engaging in these styles of leadership behaviour. High averaged ratings of leadership subfactor items on the response frequency scale indicate the tendencies of the respondent in demonstrating one leadership style more than the norm they are compared against. For example, leaders who achieved the highest average score on transformational leadership items are characterizes as more having more transformational qualities. Initial analysis by Avolio and Bass yielded sound reliability alphas for all six factors, with charisma (.92), intellectual stimulation (.83), individualized consideration (.79), contingent reward (.80), passive avoidance (.84), and active management by exception (.63). This was followed up by a second replication test, which produced similar internal consistency values to the original sample set (.92, .78, .78, .74, .86, and .64 respectively). (See Appendix A section 5 for scale sample)

Procedure

The administrative procedure of the study involved three main stages- sample generation, instrument design, and survey distribution. In compiling the research survey package, survey booklets were attached with an information sheet (see Appendix B) addressed to the leader of each company. This contained an invitation for participants to take part in the study, as well as to brief them on the general nature of the study. Information regarding assurance of anonymity, the University's human ethics committee approval for the study, and details for contacting the researcher were also provided. Lastly, the survey package contained a postage-paid return envelope to allow submission of participant responses back to the researcher.

The completed survey package was then posted to the head offices of the 100 companies chosen by the researcher. Returned surveys were collected over a one month period. Follow-up reminder letters were then dispatched to the same organisations after approximately one month and ten days to encourage responses. An electronic version of the survey was also generated using the Qualtrics Online Survey Software Platform website, with the address link included in the reminder letter to allow participants who may no longer have access to the hardcopy version of survey to participate (See Appendix C for letter sample). Returned response data was manually entered into the IBM SPSS statistics program. The methods of analyses used included descriptive statistics for generating demographic information such as average age and job tenure, and independent samples t-tests were used to compare average

scores for both study groups on each scale used.

Results

A total of 18 cases were returned from the 100 companies sampled. The response rate for the non-prosecuted sample group was 8%, and 10% for the prosecuted sample. This response rate is clearly less than desirable, however an analysis of the results was still undertaken. Issues associated with collecting data from company leaders are addressed in the general discussion section.

The demographic statistics for age, job tenure and company size are presented in Table 1. The mean age for both prosecuted and non-prosecuted groups sits fairly high at around 49 years, as commonly observed for organisational leaders working at the senior executive/directorial level. In job tenure, leaders from the prosecuted organisations shows relatively longer occupancy in their current positions than those in the non-prosecuted group. In terms of company size, the prosecuted organisations reported having a larger averages in the number of employees working for the company. The non-prosecuted group consisted of 8 males and no females, including 2 CEO's, 3 directors, 1 Managing Director and 1 Commercial Manager, and 37.5% of responses were issued from the construction and building industry, 25% from manufacturing and production, and 12.5% each from transportation and logistics, forestry, and agriculture. The prosecuted group comprised of 8 males and 2 females, including 3 CEO's, 2 Managing Directors, 1 Director, 1 Executive Director, 1 General Manager, 1 General Affairs Manager, and 1 Foreman. For the prosecuted group, 30% were from the construction and building industry, 20% from manufacturing and

production, and 10% from recreation, agriculture, forestry, recycling and waste disposal, and others.

Table1. Age, Job Tenure and Company Size for Non-prosecuted and Prosecuted Groups

	Non-Prosecuted Mean (SD) *N= 8*	Prosecuted Mean (SD) *N= 10*
Age	49.86 (6.79)	49.5 (9.91)
Job Tenure in Months	100.89 (89.64)	149 (148.14)
Company Size (number of employees)	170.63 (339.15)	220 (324.78)

Mean percentages of time allocation to organisational activities are presented in Table 2. Upon inspection it can be seen that leaders from non-prosecuted organisations spends relatively higher percentages of time on performance-related activities such as resource acquisition, logistics, budget activities, performance and efficiency issues, and contract negotiation. In safety-related activities, the non-prosecuted group also reports more time spent on compliance with legislation, legal matters, as well as other responsibilities. Conversely the leaders from prosecuted companies appears to allocate more time to pricing and sales-related performance agendas, as well as risk management, staff selection, and other human resources related issues. Overall, leaders from non-prosecuted organisational have shown relatively larger involvement in dealing with performance-related agendas with more time percentage reported for these activities, while the two groups appear equal in their

involvement with safety-related agendas.

Table 2. Mean Time Percentage of Organisational Activities By Groups

	Non-Prosecuted (Mean Time %) *N = 8*	Prosecuted (Mean Time %) *N= 10*
Safety Related Activities:		
Risk Management	11.25	12.29
Compliance with Legislation	9.29	8.13
Legal matters eg. Prosecutions	5	4
Selection of staff, and other Human Resource issues	8.67	15
Performance Related Activities:		
Resource Acquisition	15.71	7
Logistics	14.17	12.17
Budget Activities	11.88	11.43
Performance / Efficiency Issues	13.75	13.57
Pricing / Sales	12.57	22.14
Contract Negotiation	10	8.14
Other	10	5

Table 3 reports the percentage of safety-related decision making styles adopted by leaders in each group. In the non-prosecuted group, 50% of leaders adopted a group consensus-based decision making strategy: 25% indicated that they made decisions alone after consulting relevant persons separately, and 25% opted to make decisions alone after consulting relevant persons together as a group. For the prosecuted group, all 10 leaders (100%) identified the group consensus-based strategy as their main decision making style. This suggests that rather than being the sole authority on decision-making, leaders in

prosecuted organisations are largely inclined to formulate safety-related strategies after unifying opinions and reaching agreement with others as a group, whereas more leaders in non-prosecuted organisations are found to adopt more individual-based decision-making styles after obtaining the information they require from others to inform these decisions.

Table 3. Percentage of Leaders' Safety Decision Making Style Choices By Groups

Please review the following 5 strategy development styles. Thinking specifically about workplace health and safety, select the statement that best describes your decision style when making the most important strategic health and safety decisions in your organisation.	Non-Prosecuted (%)	Prosecuted (%)
I make decisions myself using the information available to me at the present time		
I obtain any necessary information from others, and then make the strategic decision myself		
I share the strategic problem with relevant persons without bringing them together as a group. Then I make the strategic decisions myself.	25	
I share the strategic problem with others in a group meeting. In this meeting, I obtain their ideas and suggestions. Then I make the strategic decision	25	
I share the problem with others as a group. Together we generate and evaluate strategic alternatives and attempt to reach agreement (consensus) on a strategic decision.	50	100

The demographic results thus far have not shown any notable outcomes distinguishing the prosecuted and non-prosecuted organisations. To test for potential influences that factors such as job tenure and company size may have on subsequent analyses, means for these variables were compared via t-tests for possible between group differences. Neither job

tenure nor company size was found to differ significantly between the two groups (p= .44 and .76 respectively). The organisational activity time allocation table also shows both organisational groups being approximately equal in their time spent on safety-related activities. One interesting point to note is the variation of decision-making styles that leaders from the two study groups have indicated. Non-prosecuted leaders are shown to be more inclined to make decisions individually while prosecuted organisational leaders tend to base decisions on the outcomes of group consensus. This result will be examined further in the discussions to follow.

Scale Reliability Analysis

Prior to conducting comparative analyses to test the hypotheses, the response data was checked for missing values, and the reliability statistics of each scale were examined thereafter. The data set consisted of one case in the prosecution sample with 5 missing values which were replaced with the item means for that group. Scale means, standard deviations and cronbach alphas are presented in Table 4. Upon inspection it is indicated that the ethical leadership scale (ELS), ethics position questionnaire (EPQ), corporate social responsibility scale (CSR) and psychopathy self-report scales (PSY) all produced satisfactory reliability coefficients. Reliability analysis of all scales was conducted using all cases (N=18), and no indication of alpha improvement with item deletion was found for any of the four attribute-based scales used (ELS, EPQ, CSR, and PSY). The Multifactor Leadership Questionnaire

(MLQ) on the other hand yielded more varying results, with two leadership style scales (Transactional and Passive Avoidant) showing significantly lower alpha values upon first analysis. Item removal was conducted to produce improved reliability alphas for these two subscales, with transactional leadership and passive avoidant leadership at .66 and .76 respectively. After confirming scale reliability, scores for each of the scales were calculated by summing the ratings to each item and dividing the sum by the final number of items in each scale. The minimum to maximum average score range achieved in the present study for each scale are as follows: Ethical Leadership Scale (5.6 - 7), Ethics Position Questionnaire (3.3 - 7), Corporate Social Responsibility Scale (5 - 7), Psychopathy Self-Report Scale (1.13 – 3.75), Transformational Leadership (2.4 – 3.55), Transactional Leadership (1.5 – 3.19), and Passive-Avoidant Leadership (.14 – 2.43). It is notable a ceiling effect can be found for several scales (Ethics, moral, and social reliability scales), with maximum scores of 7 indicating that respondents tend to rate themselves rather highly on these attributes. Similarly, extreme low average scores were found for the psychopathy self-report scale and passive-avoidant leadership scales, also suggesting that leaders may be inclined to present themselves more favourably by suppressing their ratings on these negative constructs.

Table 4. Mean, SD, and Reliability Coefficients of Attribute and Leadership Style Scales

Scale	Cronbach's Alpha	Improved Alpha	M	SD
Ethical Leadership Scale	.84	NC	6.23	.43
Ethics Position Questionnaire	.88	NC	5.77	.95
Corporate Social Responsibility	.72	NC	6.32	.56
Psychopathy Self Report Scale	.80	NC	2.13	.69
Multifactor Leadership Scales:				
Transformational Leadership	.82	NC	3.13	.35
Transactional Leadership	.57	.66	2.41	.58
Passive Avoidant Leadership	.72	.76	1.02	.59

NC= No Change

Between Group Comparison

Several independent samples T-test were then conducted to test hypotheses 1, 2 and 3. The analyses compared the measures of ethical values, moral philosophy, corporate responsibility, psychopathy, and leadership styles between the prosecuted and non-prosecuted organisations. The assumptions of homogeneity of variance were not violated, with all scales achieving non-significance on the Levene's test for equality of variance. Table 5 presents the analysis statistics, including group means, standard deviation, mean differences, t-scores and significance values. Inspection of Table 5 indicates that hypothesis 1 (Leaders in non-prosecuted companies will exhibit higher levels of ethical values, moral philosophy, corporate social responsibility, and lower levels of psychopathic traits then leaders in organisations with prosecution records) was not supported by the t-test comparison. Significant differences were not detected between the mean scores for each group. Similarly,

hypothesis 2 where leaders in non-prosecuted organisations are expected to show higher levels of transformational or/and transactional leadership styles than prosecuted organisational leaders were also not confirmed due to insignificant p values for both leadership styles in Table 6. A counterintuitive result was then yielded by the passive-avoidant leadership score comparison, where the level of passive-avoidant tendencies were significantly higher in the non-prosecuted organisation leaders at the $p < .05$ level. This subsequently disproves hypothesis 3, and suggests that in actuality it is rather the leaders in the non-prosecuted organisations who possessed higher levels of Passive-Avoidant (aversion of responsibility and decision making) leadership style than the prosecuted organisation leaders.

Table 5. T-Test Analysis: Comparison of Attribute-Based Scale Mean Scores Between Groups

	Non-Prosecuted Mean SD	Prosecuted Mean SD	T-Score (df)	Sig (2-tailed)
Ethical Leadership Scale	6.2 0.49	6.25 0.4	-.24 (16)	0.81
Ethics Position Questionnaire	6.03 0.6	5.56 1.15	1.03(16)	0.32
Corporate Social Responsibility Image Scale	6.23 0.69	6.4 0.46	-.65(16)	0.53
Psychopathy Self-Report Scale	2.24 0.54	2.04 0.8	.6(16)	0.56

All Equal Variances Assumed

Table 6. T-test Analysis: Comparison of MLQ Leadership Style Scale Mean Scores Between Groups

	Non-Prosecuted Mean SD	Prosecuted Mean SD	T-Score (df)	Sig (2-tailed)
Transformational Leadership	3.11 0.27	3.14 0.41	-.17 (16)	0.87
Transactional Leadership	2.54 0.66	2.3 0.53	.88 (16)	0.39
Passive-Avoidant Leadership	1.39 0.6	0.73 0.41	2.78 (16)	0.01

All Equal Variances Assumed

The remaining three leadership outcome sub-factor scales of extra effort, leader effectiveness, and satisfaction (Table 7 below) also shows non-significant results, indicating that levels of successful leadership outcomes also do not differ significantly between the two populations.

Table 7. T-test Analysis results of MLQ Leader Outcome Scores

	Means	SD	Mean Difference	T Score (df)	Sig (2-tailed)
Extra Effort					
Non-Prosecuted	2.79	0.5	-0.24	-.86 (16)	0.4
Prosecuted	3.03	0.67			
Leader Effectiveness					
Non-Prosecuted	3.13	0.3	-0.05	-.21 (16)	0.84
Prosecuted	3.18	0.62			
Satisfaction					
Non-Prosecuted	3	0.76	-0.3	-.89 (16)	0.39
Prosecuted	3.3	0.67			

All Equal Variances Assumed

Discussion

The current study investigated differences in the levels of leader value-based attributes and leadership styles between organisations with and without safety related prosecutions. Leaders from companies with and without records of safety-related prosecutions were examined for evidences of their ethical, moral, social, and psychopathic values, as well as the particular transformational, transactional, and passive-avoidant leadership styles that these leaders tend to exhibit towards their employees. While the data does provide some evidence of meaningful differences in one specific leadership style, the results were largely insignificant or counterintuitive of the original research hypotheses. Regarding the person-based leader attributes of ethical values, moral philosophy, social responsibility and psychopathy levels, no significant differences in these attribute levels were found between the prosecuted and non-prosecuted group leaders. This suggests that, using the present data set, leaders in prosecuted and non-prosecuted companies do not necessarily differ in their ethical, moral, social and psychopathic tendencies when directing their organization's operations. Similarly, leaders in the two study groups also did not differ significantly in their transformational and transactional leadership styles, thus showing that CEOs/directors in both groups most likely exhibits the same amount or level of transformational and transactional leadership thoughts and behaviours. What is of notable difference is the level of passive-avoidant leadership found in the present data set, whereby the non-prosecuted leaders in actuality reported having significantly higher tendencies in engaging in this style of

leadership than those from the prosecuted organisations.

This leads to a conclusion that Hypothesis 1 where leaders in organisations with no prosecution records will exhibit higher levels of a.) ethical values, b.) moral philosophy, c.) corporate social responsibility, and lower levels of d.) psychopathic personality traits when compared to leaders in organisations with prosecution records has not been supported. Albeit the two organisation achieving slight differences in the group average scores for these attributes, no significance was detected to indicate meaningful distinctions between the attribute levels yielded from leaders in these two groups. Likewise for Hypothesis 2, leaders in non-prosecuted organisations also did not demonstrate significantly higher levels of transformational or both transformational and transactional leadership styles. Postulations in Hypothesis 3 was then disproven by the results yielded in the t-test analysis, whereby the non-prosecuted organizational leaders had demonstrated a significantly higher level of passive-avoidant leadership style rather than those from the prosecuted group. This unexpected result suggested that it is the leaders from organisations without major safety-related incidents records that are in fact exhibiting more laissez faire and passive management by exception (MBEP) specific leadership tendencies in their leadership attitudes and behaviours. This entails these leaders reporting more self-perception of being responsibility-averse, delaying decision making, managing organizational obligations and issues in a passive and non-responsive manner, and being absent during times of employee need.

Despite the initial hypothesis not being supported by the results obtained, the data has yielded some interestingly unexpected trends that still warrants discussion. The findings are intriguing in that they reveal trends opposite to common predictions of leadership styles on safety-related outcomes as presented by Clarke (2013), as well as the notable distinction in safety-strategy related decision making styles between the prosecuted and non-prosecuted groups. Firstly, Clarke's examination of the dynamic between leadership styles and safety outcomes concluded that transformational and transactional leadership styles were both distinctive antecedents to safety leadership and safety outcomes. Transformational and active-transactional leadership-oriented perceptions and behaviours, such as sustained monitoring and intervention of safety issues at work, active and physical demonstrations of safety practices, and incorporating safety-orientated priorities into organisational policies were major factors to fostering successful safety climate. Through this practical influence, increased levels of employee participation and compliance to safety regulations in the workplace should become evident. Clarke's meta-analysis of various studies on safety leadership and their outcomes has identified numerous empirical data in support of this phenomenon. The leadership style results yielded by the current analysis however have been largely counterintuitive to these studies. Much of this may be attributed to the low response rate producing inconclusive analysis outcomes, however some alternative explanations may be still offered. At the introduction of this study, it was predicted that leaders from organisations without major reported incidents would demonstrate a higher level of

transformational and transactional qualities, as this was expected serve as the foundation for the companies' positive safety records. On the opposite end of this assumption, organisations with notable records of safety related prosecutions were expected to reveal leaders with distinguishably higher levels of passive-avoidant leadership styles, as the lack of attention to safety standards at work would naturally appear as a result of the tendency to neglect and avoid one's leadership duties. The reality that non-prosecuted leaders had in actuality reported significantly higher tendencies for passive-avoidant leadership behaviour in the current study then hints at the possibility of other factor(s) unaccounted for at the start of the study that may be influencing this result.

The above possibility then directs attention to the second finding of interest. In response to the Health and Safety strategy development style questionnaire in the research survey, 50% of non-prosecuted leaders elected an independent decision making style after obtaining advice or consultation while 50% made important safety decisions through group-based consensus. On the other hand, 100% of leaders in prosecuted organisations have indicated group-based consensus as their dominant method of decision making. Thus in interpreting this particular distinction between the two study groups, a speculation emerges in that safety incidents from prosecuted organisations and the passive-avoidant leadership tendencies reported by the non-prosecuted group could partly be a result of this contrast in corporate decision making styles. In particular, logistical issues of group and time coordination, as well as the individual and interpersonal dynamic that accompanies each of these strategy-forming

methods may be major factors in influencing the above outcomes.

Decision-Making Styles

Under the consensus-based decision making structure, the leader works in a group to discuss safety related issues and agendas with other top level executives and directors. A decision is then only made after agreement is achieved with all members across the board. Conversely, leaders who adopt the individual decision making style may consult and elicit suggestions from others to obtain the information they need, but ultimately hold the power to make the final call on safety matters. Thus while 50% of the safety decision making styles adopted by non-prosecuted leaders still involves seeking input from others, the main distinction lies in that these leaders do not need to wait for a consensus to be reached. An examination of leadership styles by Faraci, Lock, and Wheeler (2013) especially highlights this time-based factor as a major disadvantage in consultative and consensus leadership styles. Efficiency in finalizing and implementing strategic decisions is crucial to preventing safety incidents from occurring, and it may be that the group consensus system in prosecuted organisations are causing its leaders to wait around too long for agreement to resolve safety issues in time. Compared to individual decision-making styles, group based consensus systems are more prone to disruptions in communication due to the increased number of people required in the process, which then again may lead to issues of timeliness and delay in leader response and action behaviours (van Ginkel, Tindale, & van Knippenberg, 2009;

Jackson, Hutchinson, Peters, Luck, & Saltman, 2013). Group dynamic issues such as "analysis paralysis" may also be one example of a disruption to making timely safety-related decisions, whereby discussions have come to a standstill due to conflicting opinions between group members and agreement is unable to be reached for safety decisions to be finalized (Snowden & Boone, 2007). Leaders from prosecuted organisations thus may be experiencing these scenarios more frequently due to a higher level of contrasting ideas and strategic views being presented during group discussions. Board participants may become caught on resolving differences of opinion and ultimately failing to reach agreement on safety matters in a timely manner. Conversely, individual leaders in non-prosecuted companies may be relatively free of this group-time constraint, thus enabling critical safety decisions to be made promptly in response to pressing organisational safety needs.

The structure by which top level decision-making groups are formed may also exert some impact. Under corporate contexts, it is not uncommon for the top boards to be comprised of external directors and other industry shareholders alongside the organisation's own executive leaders (Dalton, Daily, Ellstrand, & Johnson, 1998). In such cases these leaders have their decision making powers partly or wholly governed by the external investors who often may not possess safety-specific knowledge regarding the industry's operations (Bainbridge, 2002). It is also a common case for individual leaders, being the internal expert on the technical workings of their business, to be better equipped with knowledge of how the mechanisms of the industry runs, as well as possessing more decision-

making powers than those controlled by external boards (Nanda, Silveri, & Han, 2013). This suggests that non-prosecuted leaders could be making more quality safety decisions than prosecuted organisations, where it is possible that group decisions often involve participation from external directors who are not as familiar with the operations of the company, and therefore cannot provide constructive advice on safety issues. Individual leaders who rely less on the governance of outside boards may also tend to introduce more diversity into their decisions, as well as taking more necessary (often profit-related) risks or investments to improve the safety standards in the company (Deutsch, 2005; Nanda et al., 2013). Furthermore, history analysis studies by Dowell, Shackell, and Stuart (2011) also reveals that smaller, more independent board directors and CEO's tends to demonstrate more versatility and swiftness in response when firms are facing critical business periods. This independence in executive control may be another possible factor that is facilitating rapid decision-making powers to non-prosecution leaders when urgent safety strategies are required.

This influence of decision group-structure could also be applied to explain the lack of differentiation in levels of value-based attributes between leaders in the two study groups. It may be plausible that leaders do not differ inherently in their level of ethical, moral, social and psychopathic characteristics under neutral conditions not requiring value-based judgements (such as the time they responded to the research survey), but deviates from this when they are under actual influence from the organisational structure in which they work around. In particular, Dalton et al. (1998) notes that the size of the firms, in addition to the

composition of the top decision-making body, notably has a significant impact on the discretional powers a CEO holds. This restriction in freedom of action then proceeds to affect the degree to which leaders may control company activities, access resources, and implement organisational strategies. Under this premise, it is then also possible for a leader's ethical, moral, social and personality based attributes to be influenced or controlled by the level of authority they hold. Demands and expectations from higher-governing directors or investors may place pressure on CEOs who rely on group decisions to make ethically or morally compromised decisions regarding safety issues, particularly when financial and other profit-related implications against shareholder interests are involved (Deutsch, 2005).

Furthermore, other interpersonal considerations in group dynamics are also interpreted in light of the prosecuted organisation's decision-making styles. In particular, Brahm and Kleiner (1996) lists social, ego, and risk-averse behaviours as common concerns for individuals taking part in group decision procedures. Social conformity first of all may be a likely obstacle in conveying opinions during board meetings, as it often of human nature for individuals to adhere to the voice of the large majority. Under organisational contexts, a CEO facing a board of external officials may feel compelled to adopt the preferences and interests of relevant firm investors and directors while inevitably compromising other objectives in the process (Dalton et al., 1998). Applying this to the current situation, leaders from prosecuted organisations may be finding themselves conceding to pressure from higher authority to prioritize performance or financial agendas over safety matters. A case of herd mentality

could also be a product of group conformity, whereby leaders tend to accept the majority consensus without further probing or exploration of alternatives (Bainbridge, 2002). It is possible that this may then in turn lead to either a failure to adequately address safety problems at work, or, if safety is not mentioned at all by the larger group, a complete lack of focus on safety-related issues altogether. Secondly, Brahm and Kleiner (1996) discusses the influence of the leader ego on group decision making. Leaders who are the head and representative of a decision panel may be concerned about how their opinions and decisions impact the rest of the organisation's outlook, and therefore become reserved in their ideas or suggestions for improving safety measures. Similarly, executive leaders whose decision making powers are controlled by a higher external board may also be wary of how their actions are viewed and criticized by the rest of the board authorities. This then ties into the last influence of risk-averse behaviours, where leaders become unwilling to be exposed to accountability and offering ideas that may elicit conflict with others in the group (Staver, 2013). These are all likely factors that are hindering prosecuted leaders from maintaining safety standards in their industries, and consequently increasing opportunities for safety incidents to occur. On the other hand non-prosecuted leaders who are less bound by such group influences in their decision making process may act more freely and adequately in tending to safety matters that require attention.

Passive-Avoidant Leadership

The contrast between decision making styles and group versus individual dynamics may also provide some explanations for the significant passive-avoidant leadership tendencies reported in the non-prosecuted group leaders. The current study thus makes a theoretical interpretation that group-based leaders, such as those in prosecuted organisations, may tend to adopt a group mentality where leadership roles and responsibilities are concerned. That is, due to leaders in prosecuted organisations utilising more team-based approaches when formulating safety-related strategies, they may perceive any negative safety outcomes as being less the result of their own influence and more by the group itself overall. Being part of a larger decision-making body, leaders have more room to pass around the baton of responsibility and feel less accountable when things go awry. In situations where multiple individuals are relevant to the decision making process, it is also possible for leaders to be influenced by role ambiguity as they perceive themselves as less as the sole source of authority. The responsibility baton is then passed around the decision panel with no clear indication of who is required to make the final call. Prosecuted leaders may therefore feel more inclined to attribute organisational problems and lack of action-initiation as an outcome of the collective group they work in, and thus do not perceive themselves specifically as the reason for any passive-avoidant issues that have risen in the past. This role ambiguity may then lead to further uncertainty amongst other employees in the decision-making body, which has been empirically correlated with decreased perception in leader effectiveness, job

satisfaction and turnover rates (Cicero, Pierro, & Van Knippenberg, 2010). This phenomenon could then further instigate occurrences of safety related incidents in prosecuted organisations, whereby the uncertainty in top-level decision groups begins to cloud operational clarity down in the frontlines of the industry. Bainbridge (2002) also identifies social loafing as one of the downfalls of group decision making, as having the presence of other organisational members may cause leaders to take a back seat during critical discussions. This could also influence prosecuted leaders to feel less responsible for any negative outcomes associated with passive-avoidant leadership. Conversely non-prosecuted leaders who work more individually have no excuse for shedding decision-making responsibility onto others, and therefore may be more conscious of the link between their own behaviour and failures that arise from the company's operations. This increased awareness may ultimately be another potent factor that contributes to the higher level of passive-avoidant tendencies reported by these leaders in the leadership style survey.

An examination of Kelloway, Mullen, and Francis' (2006) analysis of transformational and passive-avoidant leadership styles on safety outcomes also offers some further explanations. In highlighting the distinction between different leadership constructs, the authors emphasizes the fact that elements of positive (transformational and transactional) and negative (passive-avoidant) leadership styles may co-exist within individuals. A leader may thus demonstrate qualities of both transformational and passive-avoidant leadership, and may be identified as either one of the leader types depending on the frequency at which they

demonstrate each leadership style. It is thus possible for non-prosecuted leaders to exhibit both leadership styles in tandem with each other, but due to earlier discussions on individual leader dynamics, may subsequently perceive their passive-avoidant qualities as being more frequently accentuated than their transformational attributes. Based on this theory, Kelloway and colleagues continues to suggest that it is likely for leaders to demonstrate different leadership styles in differing work situations. Leaders may demonstrate transformational qualities in aspect of the organisation's operations (eg. performance and finance related goals), while behaving passively or avoidant of duties in another (safety and employee wellbeing). This then becomes a plausible explanation as to why non-prosecuted organisations experiences less major safety-related incidents despite reporting higher levels of passive-avoidant leadership, as these leaders may in fact be demonstrating passive avoidant qualities in areas not related to safety, but because such other areas might occupy a larger portion of their organizational agendas compared to safety-related matters, it has caused these leaders to perceive themselves as more passive-avoidant than transformational leaders. Simultaneously, these leaders may have been demonstrating adequate transformational leadership in their performance of safety-related obligations, and thus contributed positively to maintaining workplace safety standards and ultimately reducing risks for incidents to occur.

Research Strengths and Limitations

An obvious setback within the current study was the lack of response data available to provide a more reliable and comprehensive analysis of the results. This limitation was not due to methodology design. A reasonable number of companies with prosecution records that fitted the research criteria for the current study were located. The sample issue perhaps has more to do with access to top-level organizational leaders (eg. names, head office location, contact information) were scarce and the study was forced to rely on addressing survey packages to general "CEO/Director" titles in some cases as the leader's identity or name was not available in public records. Furthermore, study participation may have been hampered due to the sensitive nature of the study and the level of personal information the research survey was attempting to collect. Considerations of initiating contact with organization leaders to arrange research participation was also not feasible as direct contact may have negatively influenced response intentions further, and thus making sufficient empirical data difficult to obtain. The use of participation incentives to encourage response rates were considered but ultimately discarded. While other research involving general population samples may benefit from utilizing reward incentives such as vouchers and prize draws, using such approaches on a formal high-authority group such as organisational CEOs appeared less appropriate. Efforts to encourage responses that were acceptable within the scope of the current study were still made however, such as by dispatching follow up letters to the organistions surveyed to prompt for replies.

A second issue to note is the problem of social desirability in leader responses. It is highly likely that leaders from either study groups felt inclined to present both themselves and/or their organisation in a more positive light. This social desirability bias is inherent to all self-report survey studies however, and the current research did take measures to minimize the level of social desirability by limiting the emphasis the survey items had in relation to health and safety. Particular measures were also taken in an effort to control for other extraneous factors that may have affected the accuracy and relevance of leader responses. This included concerns that the participants who had responded to the surveys were 1.) not employed or involved with the organisation at the time incidents occurred, 2.) not occupying the relevant job position desired for the current study, and 3.) not directly involved with health and safety-related decisions or activities in the company. These were accounted for through obtaining and analyzing demographic information such as position title and job tenure, as well as utilizing Judge and Dobbin's (1995) decision-making style questionnaire and the organisational activity time allocation form.

Despite the study power issue however, notable advantages may be found with the current investigation. The main strength of this quasi-experimental field study lies in that this design may be the most suitable research design for determining the leadership antecedents of high-risk industry safety incidents. Given obvious ethical considerations, it would be entirely impossible to carry out a full experimental study whereby leaders are prompted to make value-based decisions under laboratory settings with the aim of seeing if such decisions

results in industrial incidents. Thus by utilising real safety prosecution data, the present methodology produced a study that most closely approximates a true experiment in capturing and explaining the influences of leadership attributes on organisational safety outcomes. The current study was also introduced during the timely rise of prominent organisational safety alerts in the New Zealand high-risk industry scene, which adds further relevance to the data obtained by facilitating understanding of the possible individual and group dynamics that underlies the occurrence of organisational safety failures.

Implications for Further Research

Given the prominence of leader decision-making styles in the results, future research may also attempt to identify possible influence of organisational decision-making styles on a leader's value-based attributes, as well as how these elements interact to produce specific safety outcomes. Furthermore, studies may attempt to reveal the exact practical examples of how this interaction affects the decisions being made. For instance, a CEO may compromise their ethical and moral considerations for employee wellbeing by suppressing safety-related discussions due to the pressure of facing a higher decision board. A leader acting under a consensus group may feel less compelled to reject a safety-related decision derived from a majority vote, even if such a decision was less than ideal. By revealing the exact effects the leader experiences from such processes, methods of intervention or improvement could be suggested to facilitate better judgement and action under these circumstances. A further

correlational component may then be added to test for relationships between leader attributes and safety outcome variables (eg. employee perceptions, types of policies formed around safety issues, organisation incident rates, etc). Capturing employee reports of leader behaviours in a 360 degree style multi-rater study may also provide a more comprehensive and accurate view of true leader attributes. Due to the nature of corporate businesses involving numerous complexities in their operation and structure, studies should also endeavour to account for other organisational factors in their examination of leader attributes. These may include the financial and performance status of organisations, the structural make-up of decision-making bodies, the type of industry studied, and the specific operational norms and characteristics unique to those industries. Lastly, studies may also investigate the possible effects the newly reformed Health and Safety at Work Act may have on leader safety perceptions in the workplace. The present study may be replicated with specific organisations after the law change to determine potential differences in leader attitudes and behaviour towards organistional safety issues, and compare these along with post-law change incident rates against figures reported beforehand.

Conclusion

The initial assumptions of this study was built on the premise that organistional safety outcomes are partly a product of top-leader value-based attributes and leadership styles. However the results in the present study have suggested, decision-making styles and other

structural and interpersonal dynamics may also have a significant part to play. It is evident that leader attributes and operating styles do not act in isolation in affecting decisions related to safety outcomes. Rather, they act as one of the many components in a larger and more complex interaction of social and organisational processes. Results from the current study have then signaled a need for further investigation into the exact practical factors within this interaction that compromises leader values and impedes ideal decision-making on safety matters. Ultimately, it remains indisputable that an organisational leader wields considerable powers of influence over an industry's operations, along with the immense responsibility of demonstrating decisions and behaviours that holds significant implications for corporate safety outcomes. As seen from the Pike River incident, a lack of awareness and action from top executives towards safety management in the operating field can result in catastrophic losses of worker lives and organisational credibility. The emphasis that the antecedents for positive safety outcomes originates from the top thus cannot not be understated. Finally, regardless of whether such responsibility lies with a single individual or a larger governing body, organisations have the irrevocable duty of not only ensuring adequate safety measures are being implemented, but also that the top leaders running its operation are also ethically, socially, and knowledgably competent in delivering these crucial processes.

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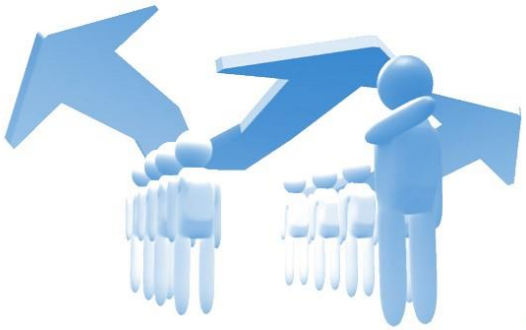
Table of Appendices

Appendix A



Psychology Department
University of Canterbury
Private Bag 4800, Christchurch
New Zealand
General Inquiries:
Phone +64 3 364 2902

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

New Zealand Industrial Leadership Research Survey

University of Canterbury

Trisha Chueh

Associate Professor Christopher Burt

Demographics

The following questions are about you, your company, and your current position within that organisation

Age (in years): _____

Gender: M / F

Job Position title: _____

Your tenure in this company: _____ **Years** _____ **Month**

Size of Company (number of employees): _____

Industry type (Please tick):

Forestry	☐
Agriculture	☐
Construction & Building	☐
Energy & Power	☐
Transportation & Logistics	☐
Manufacturing & Production	☐
Technology	☐
Recycling & Waste Disposal	☐
Recreation	☐

Other (Please specify) ☐ _____

… Thanks for your input!

Your valuable time and effort in participating in this research is greatly appreciated. To return your completed survey booklet, simply use the postage-paid return envelope included in the survey package. The separate information form does not need to be returned.

If you would like to provide some further thoughts or queries regarding the survey or any of its contents, please feel free to leave a comment below:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Please review the following five strategy development styles. Thinking specifically about workplace health and safety, select (tick) the statement that best describes your decision style when making the most important strategic health and safety decisions in your organisation.

I make decisions myself using the information available to me at the present time.	☐
I obtain any necessary information from others, and then make the strategic decision myself.	☐
I share the strategic problem with relevant persons without bringing them together as a group. Them I make the strategic decisions myself.	☐
I share the strategic problem with others in a group meeting. In this meeting, I obtain their ideas and suggestions. Then I make the strategic decision.	☐
I share the problem with the others as a group. Together we generate and evaluate strategic alternatives and attempt to reach agreement (consensus) on a strategic decision.	☐

To help us understand how your time is spent as a leader in your organisation, please indicate the approximate percentage of your time that is spent on each of the following activities:

Risk Management:	_____ %
Resource Acquisition:	_____ %
Logistics:	_____ %
Budget Activities:	_____ %
Performance / Efficiency Issues:	_____ %
Pricing / Sales:	_____ %
Contract Negotiation:	_____ %
Compliance with legislation:	_____ %
Legal matters, such as prosecutions:	_____ %
Selection of staff, and other human resource issues:	_____ %
Other: _____	_____ %

Appendix A Section 1: Ethical Leadership Scale

Please rate the following items to the extent that they apply to yourself using the 1 to 7 scale below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

I listen to what employees have to say	☐
I discipline employees who violate ethical standards	☐
I conduct my personal life in an ethical manner	☐
I have the best interests of my employees in mind	☐
I make fair and balanced decisions	☐
I can be trusted	☐
I discuss business ethics or values with employees	☐
I set an example of how to do things the right way in terms of ethics	☐
I define success not just by results but also the way that they are obtained	☐
When making decisions, I ask "what is the right thing to do?"	☐

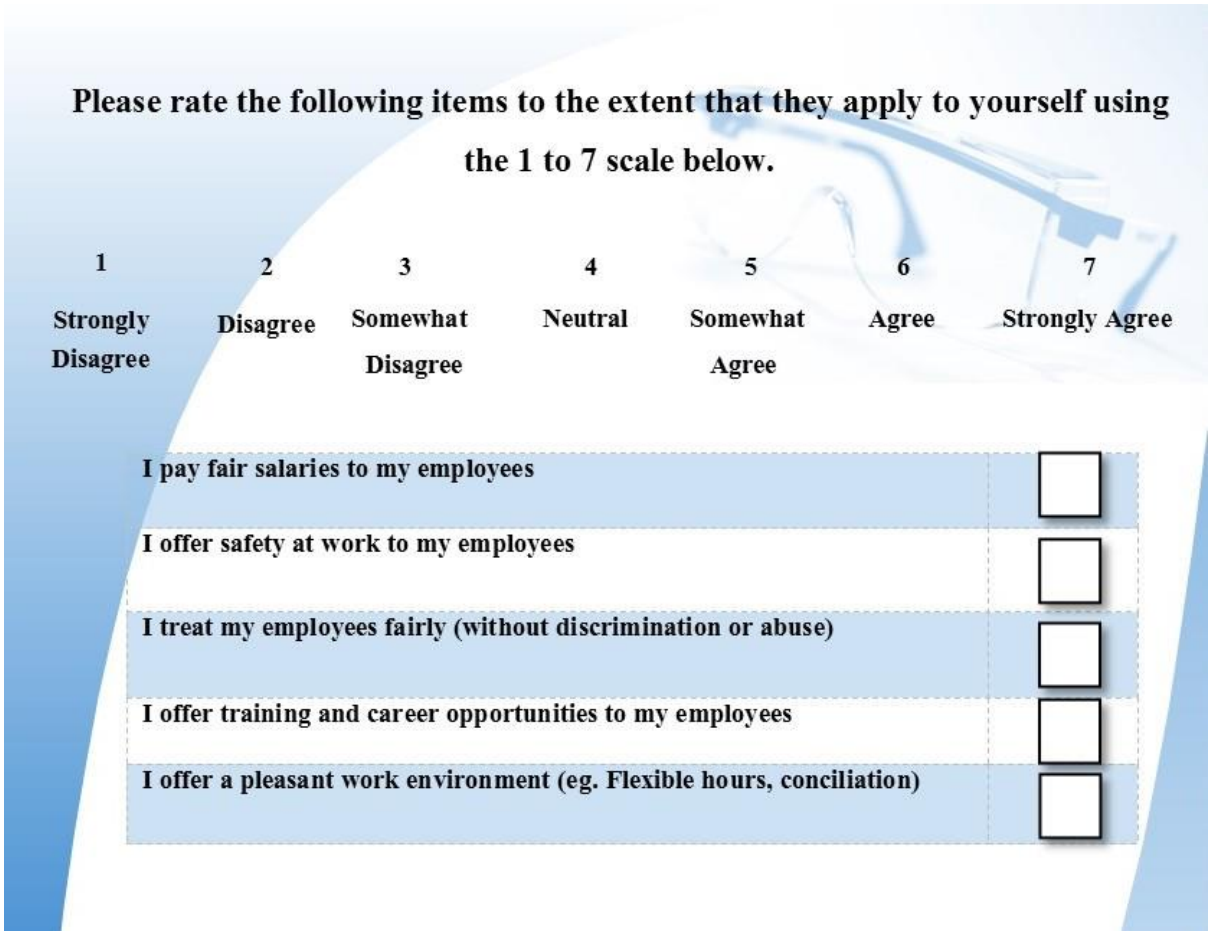
Appendix A Section 2: Ethics Position Questionnaire

Please rate the following items to the extent that you agree or disagree with each statement using the 1 to 7 scale below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

A person should make certain that their actions never intentionally harm another even to a small degree	☐
Risks to another should never be tolerated, irrespective of how small the risks might be	☐
The existence of potential harm to others is always wrong, irrespective of the benefits to be gained	☐
One should never psychologically or physically harm another person	☐
One should not perform an action which might in any way threaten the dignity and welfare of another individual	☐
If an action could harm an innocent other, then it should not be done	☐
Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral	☐
The dignity and welfare of people should be the most important concern in any society	☐
It is never necessary to sacrifice the welfare of others	☐
Moral actions are those which closely match the ideals of the most "perfect" action	☐

Appendix A Section 3: Corporate Social Responsibility Image Scale



Please rate the following items to the extent that they apply to yourself using the 1 to 7 scale below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

I pay fair salaries to my employees	☐
I offer safety at work to my employees	☐
I treat my employees fairly (without discrimination or abuse)	☐
I offer training and career opportunities to my employees	☐
I offer a pleasant work environment (eg. Flexible hours, conciliation)	☐

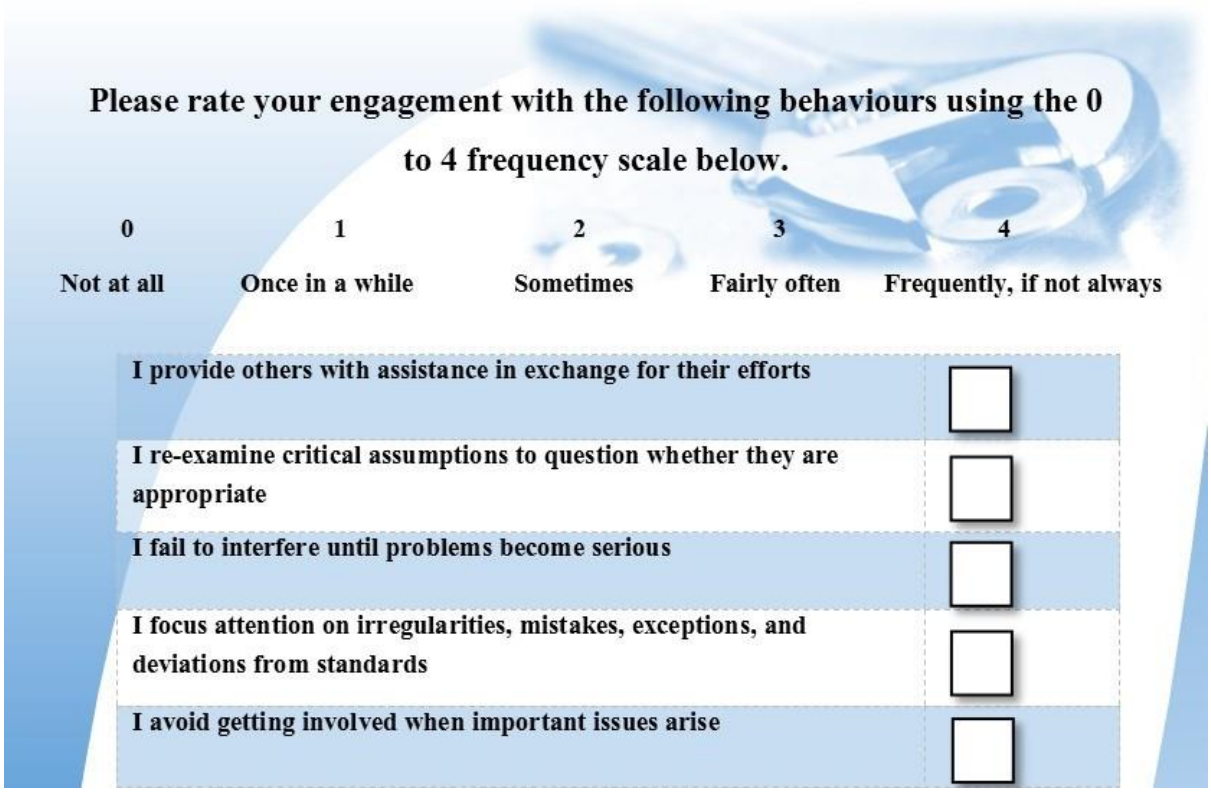
Appendix A Section 4: Levenson Psychopathy Self-Report Scale

Please rate the following items in terms of the extent you agree with each statement using the 1 to 7 scale below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

Success is based on the survival of the fittest; I am not concerned about the others	☐
For me, what's right is whatever I can get away with	☐
In today's world, I feel justified in doing anything I can get away with to succeed	☐
My main purpose in life is getting as many benefits as I can	☐
Making a lot of money is my most important goal	☐
I let others worry about higher values; my main concern is with the bottom line.	☐
People who are foolish enough to get ripped off usually deserve it	☐
Looking after myself is my top priority	☐
I tell other people what they want to hear so that they will do what I want them to do	☐
I would be upset if my success came at someone else's expense	☐
I often admire a really clever scam	☐
I make a point of trying not to hurt others in pursuit of my goals	☐
I enjoy manipulating other people's feelings	☐
I feel bad if my words or actions cause someone else to feel emotional pain	☐
Even if I was trying really hard to sell something, I wouldn't lie about it	☐
Cheating is not justified because it is unfair to others	☐

Appendix A Section 5: Multifactor Leadership Questionnaire



Please rate your engagement with the following behaviours using the 0 to 4 frequency scale below.

0	1	2	3	4
Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always

I provide others with assistance in exchange for their efforts	☐
I re-examine critical assumptions to question whether they are appropriate	☐
I fail to interfere until problems become serious	☐
I focus attention on irregularities, mistakes, exceptions, and deviations from standards	☐
I avoid getting involved when important issues arise	☐

* Due to copyright requests from the scale providers, a 5-item sample of the MLQ is provided in place of the whole scale.

Appendix B

College of Science
Department of Psychology
Tel: + 64 3 3642902, Fax: +64 3 3642181
Email: psychology@canterbury.ac.nz
www.psyc.canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

5th September 2014

Dear CEO/Director

We would like to invite you to participate in a research project on leadership in New Zealand industries. The aim of this project is to examine leadership styles in different types of organisations in New Zealand.

You are invited to complete the enclosed survey that includes an assessment of your perceptions on leadership styles and attributes, which should take about 10 to 15 minutes to complete. The completed survey can be returned using the postage-paid return envelope provided. The survey is entirely anonymous, and all responses will be kept strictly confidential. Neither participants nor organisations are identifiable, and thus the complete privacy of respondents is guaranteed.

As the survey is returned anonymously, any data provided are not be able to be withdrawn from the study once submitted. By completing the survey it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that anonymity will be preserved.

The project is being carried out for the purposes of a Masters degree in Industrial and Organisational Psychology at the University of Canterbury by Trisha Chueh under the supervision of Associate Professor Christopher Burt. We can be contacted at trisha.chueh@pg.canterbury.ac.nz and christopher.burt@canterbury.ac.nz respectively to discuss any concerns you may have about participation in the project.

This study has been reviewed and approved by the Department of Psychology, University of Canterbury, and the University of Canterbury Human Ethics Committee.

Yours Sincerely

Trisha Chueh
Masters Candidate
University of Canterbury

Appendix C

College of Science
Department of Psychology
Tel: + 64 3 3642902, Fax: +64 3 3642181
Email: psychology@canterbury.ac.nz
www.psyc.canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

7th October 2014

Re: New Zealand Industrial Leadership Research

Dear CEO/Director

In September you should have received an invitation to participate in my New Zealand Industrial Leadership Research project. I would like to thank you if you took the time to complete the survey. If you would still like to participate it is not too late, and surveys can be returned up until October 31st.

If you no longer have access to the original paper copy of the survey that was sent with the initial invitation letter, an electronic online version of the survey is available at the link provided below.

http://tinyurl.com/l6fa7kb

Once again, thank you for your assistance and I look forward to your input.

Yours Sincerely,

Trisha Chueh
Masters candidate
University of Canterbury